

FIG.1

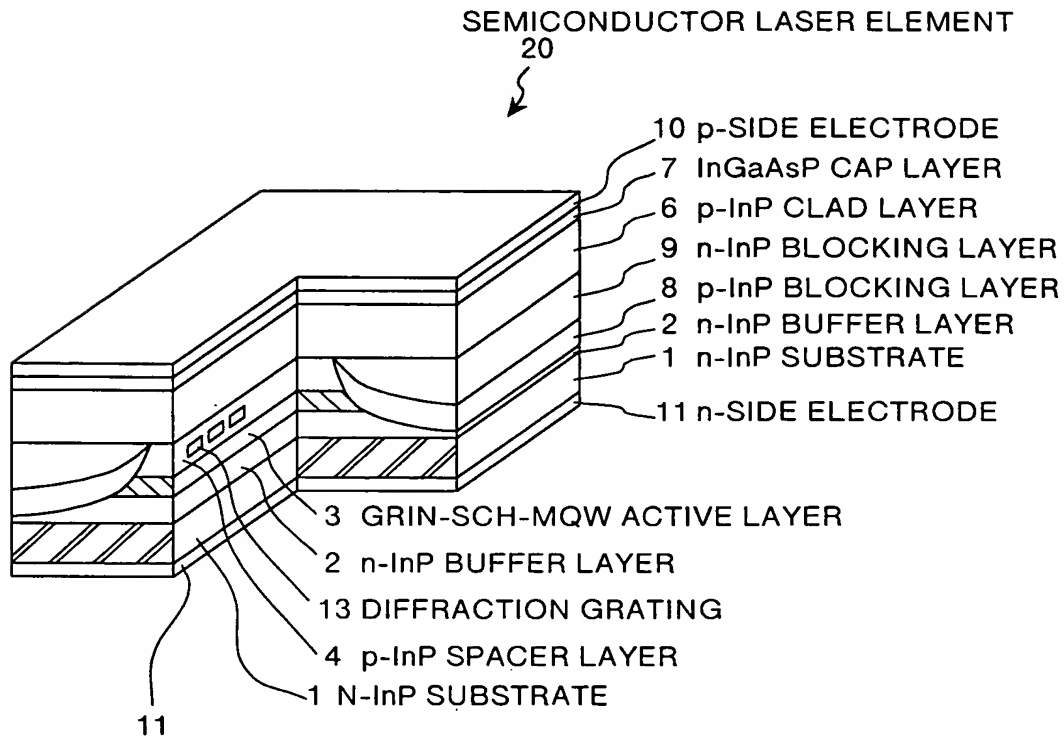


FIG.2

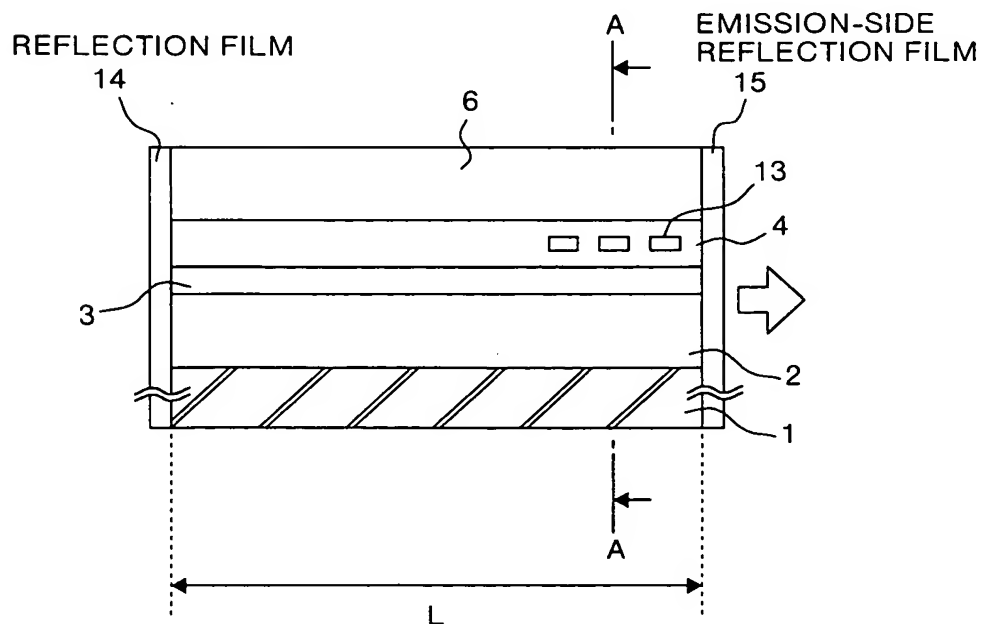


FIG.3

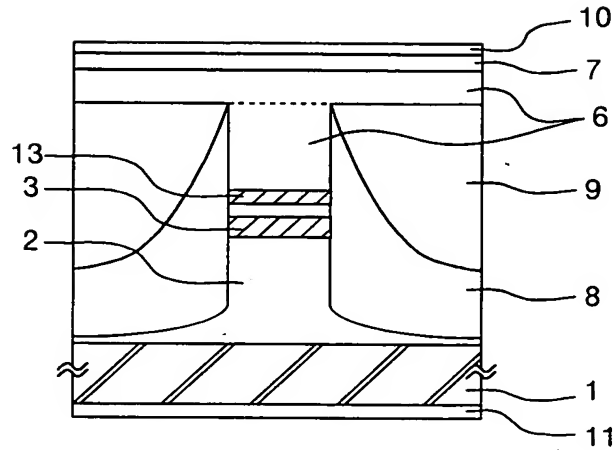
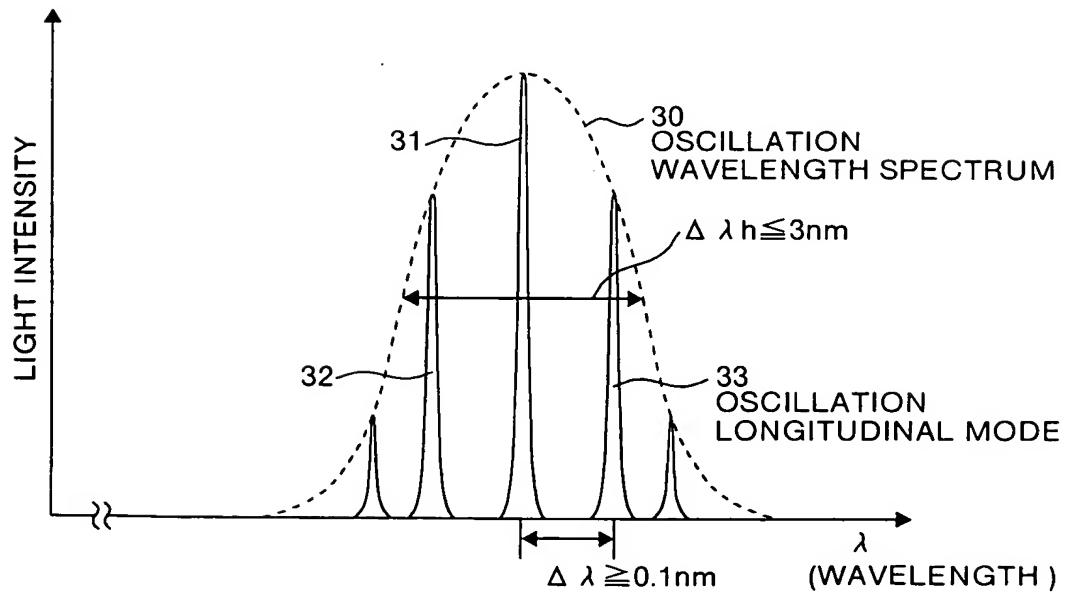


FIG.4



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FIG.5A

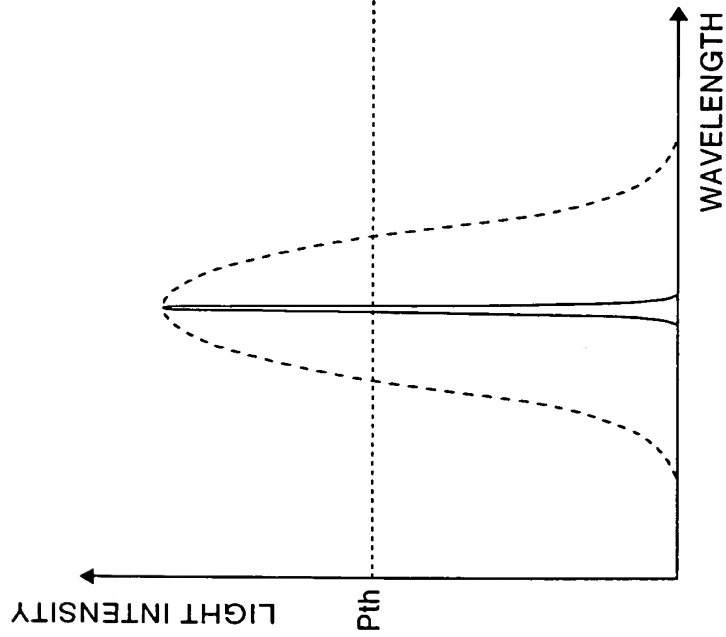
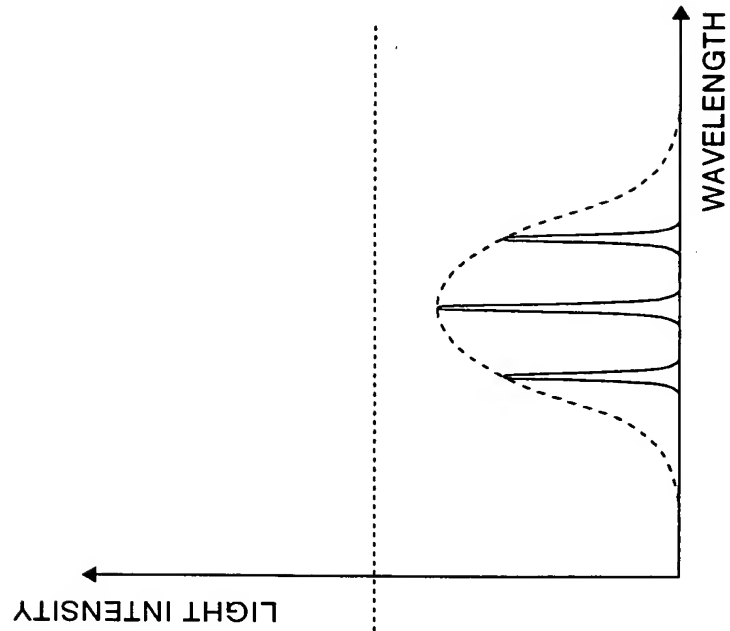
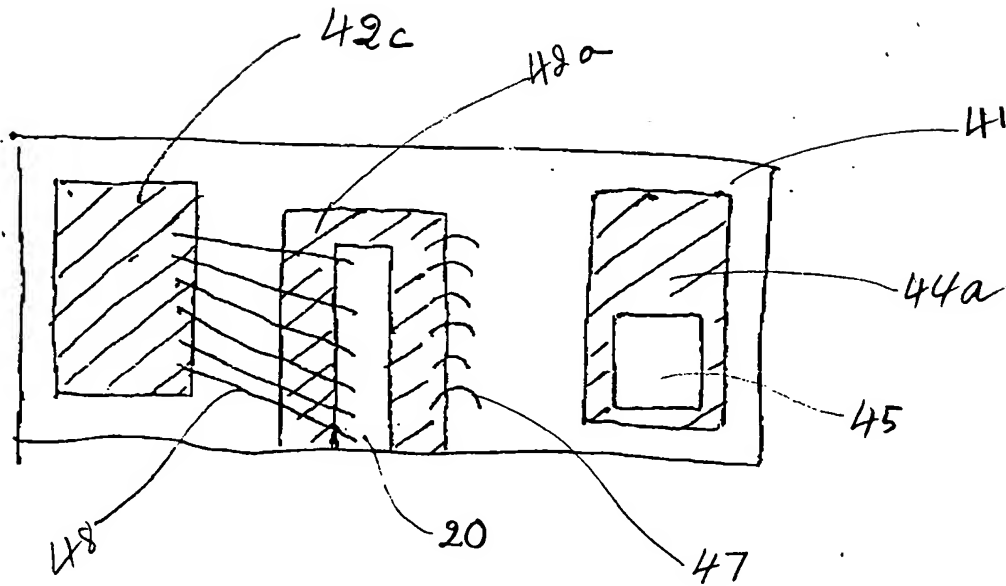


FIG.5B



The diagram illustrates a temperature control system for a semiconductor device. The device structure includes a substrate 41 with a thin layer 42b on top. Below 42b is a layer 42, which contains a series of alternating shaded and unshaded rectangular regions 44. A layer 42d is positioned above the 44 regions. Above 42d is a layer 42a, which contains a series of small rectangular features 47. A layer 48 is positioned above 42a, and a layer 49c is positioned above 48. A layer 45 is positioned above 49c. A current source 200 is connected to the device through a switch 200. A current detector 201 is connected to the device and the current source 200. A temperature control section 202 is connected to the device and a storage section 203. The storage section 203 is connected to the current detector 201 and the current source 200. The device is labeled 110 and 120.

FIG. 6B



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FIG.7A

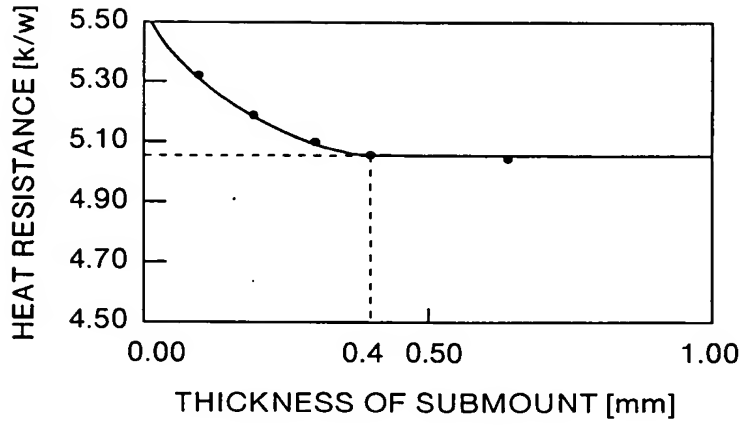


FIG.7B

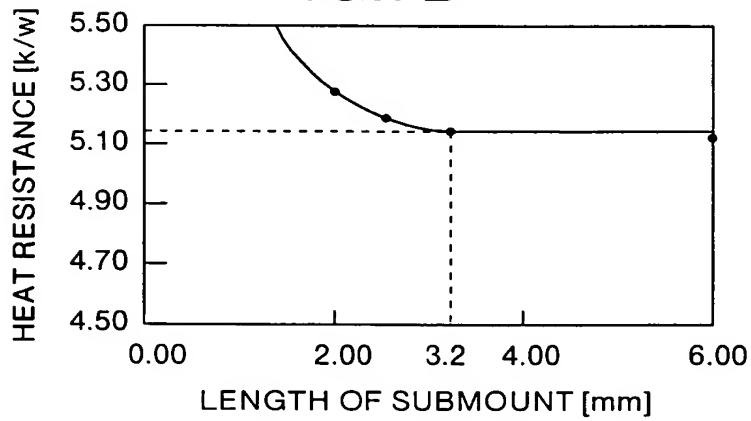
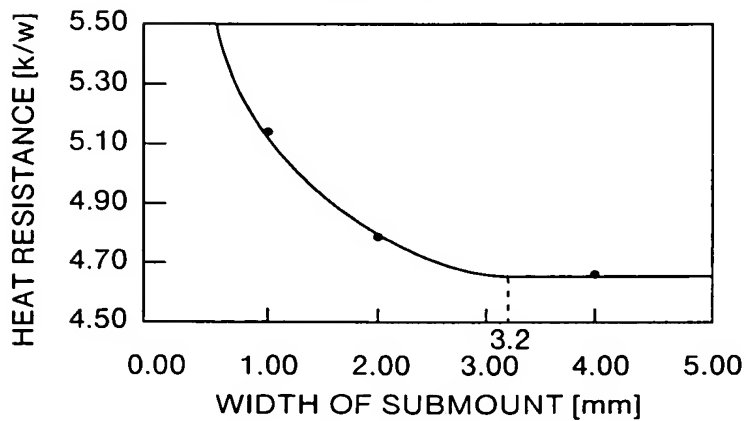
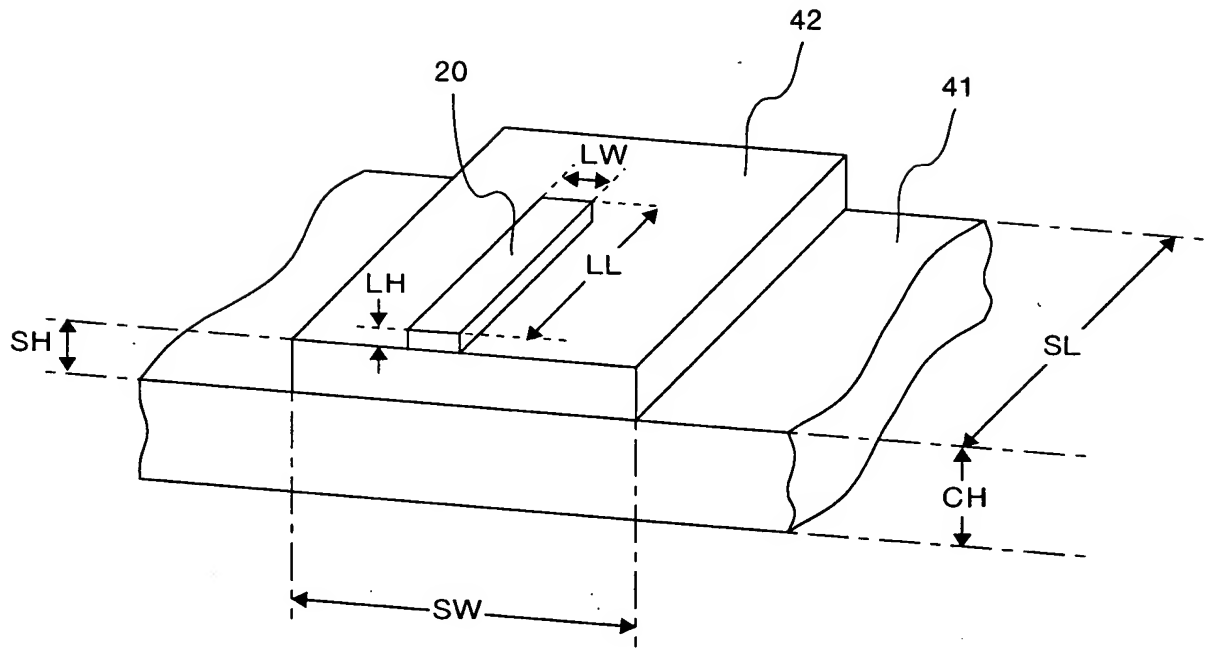


FIG.7C



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FIG.8



2080E0" 21526001

FIG.9A

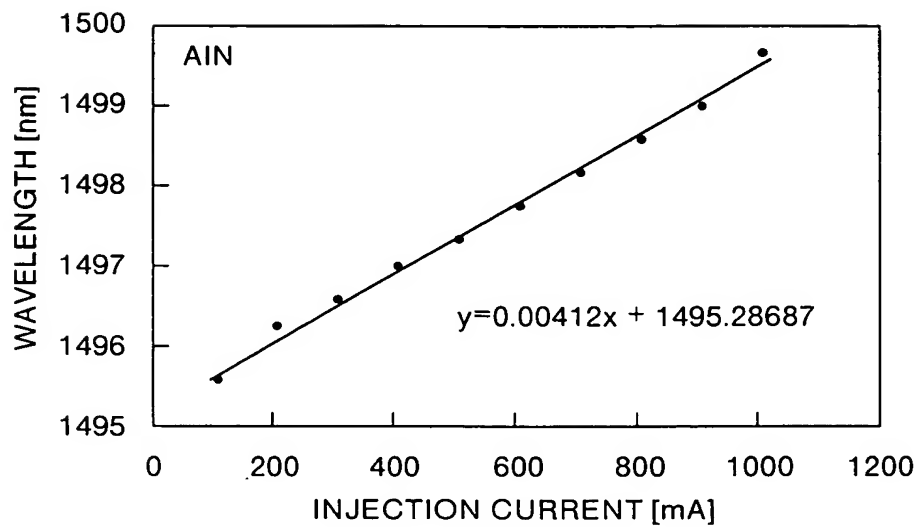
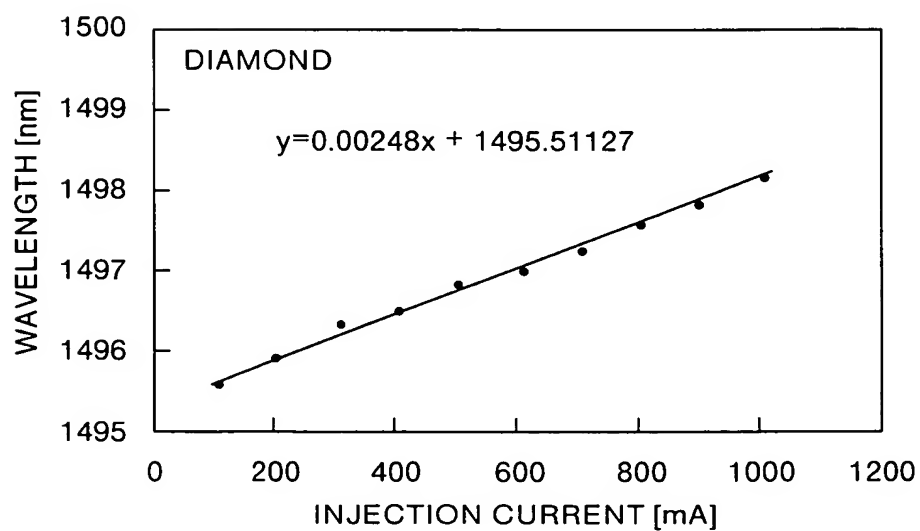


FIG.9B



2080E0" 2F52600F



FIG.10

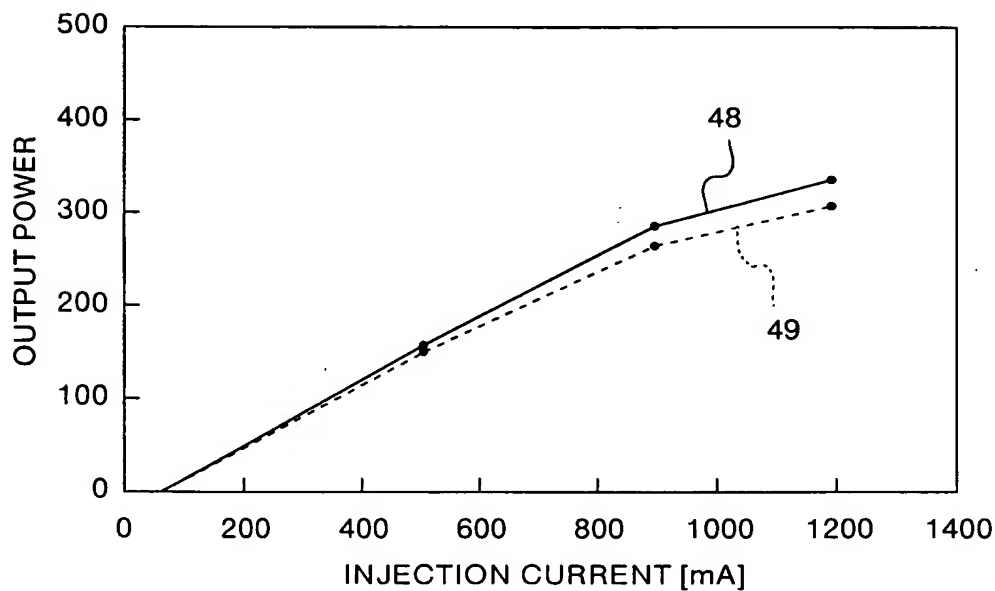


FIG.11

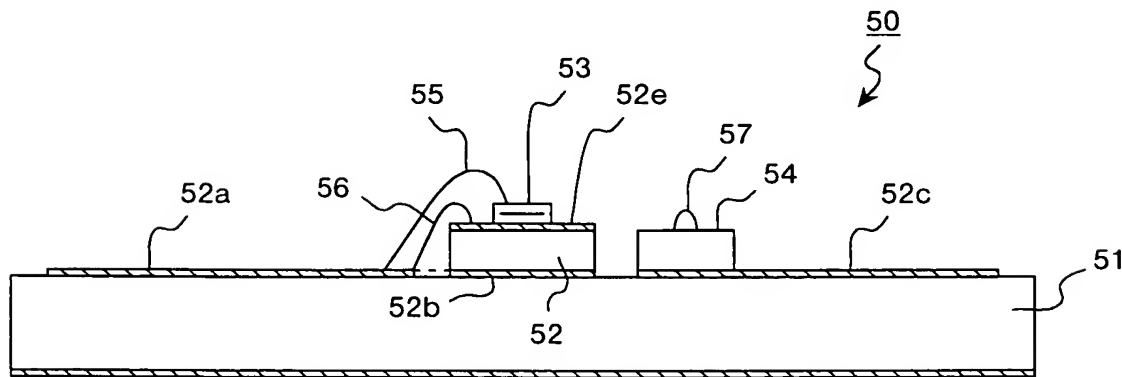


FIG.12A

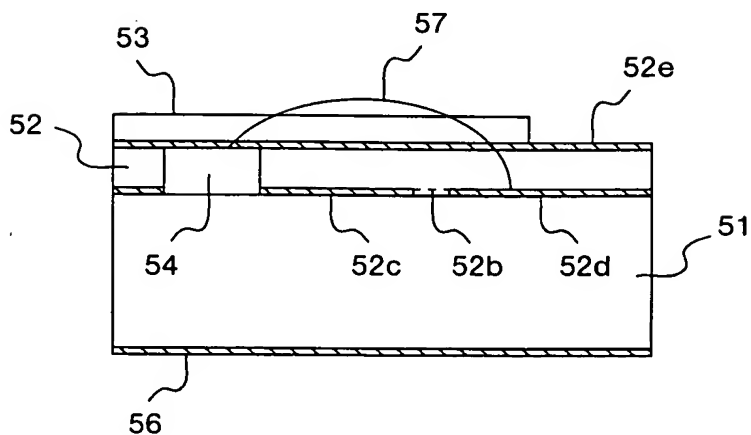
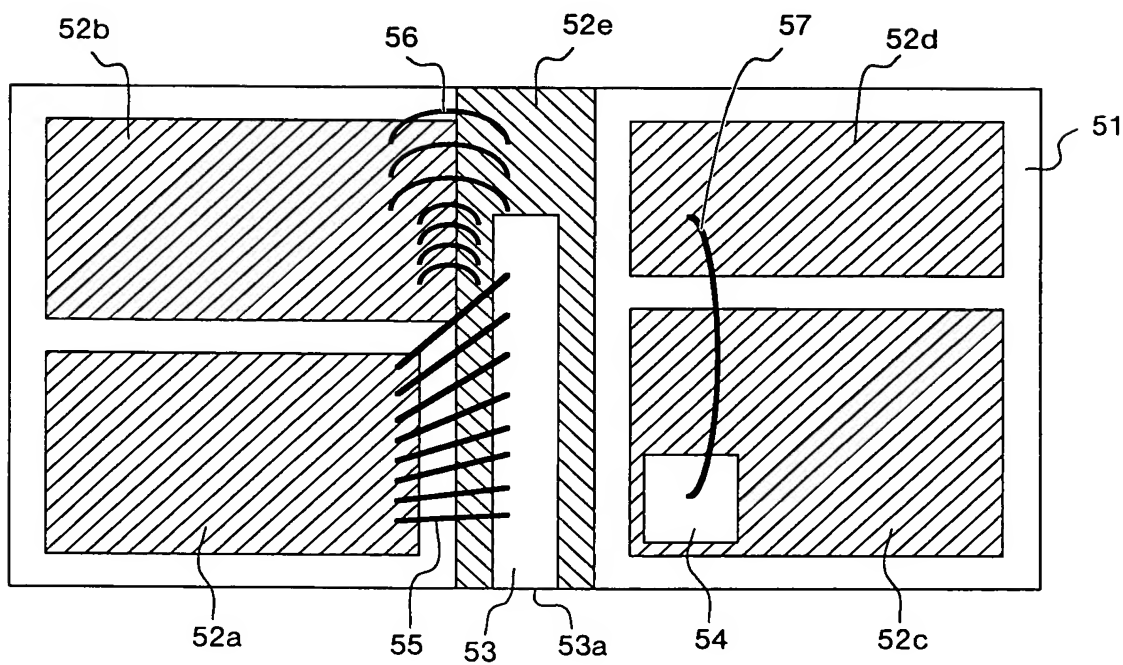
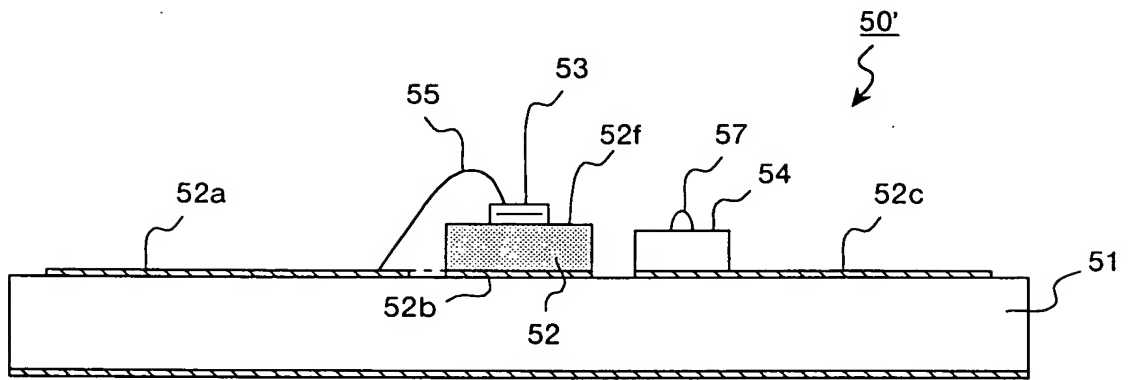


FIG.12B



2080E01526001

FIG.13



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FIG.14A

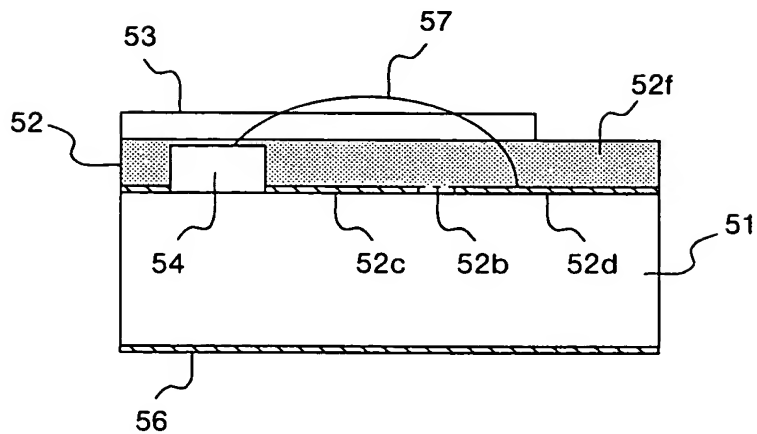
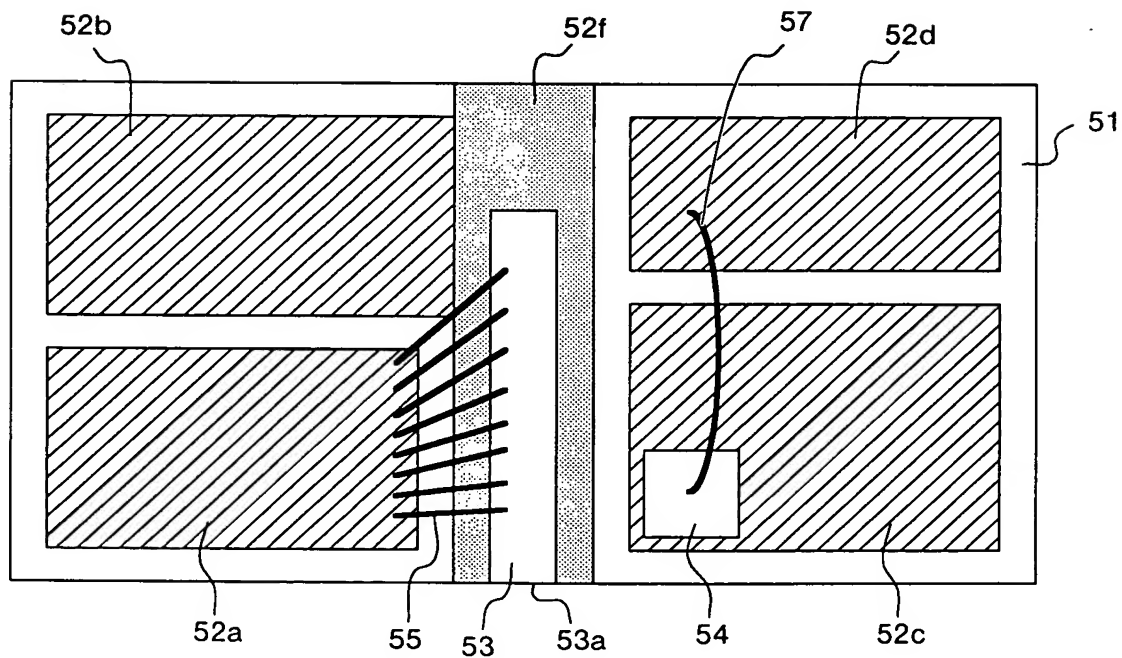


FIG.14B



2080E0 2152600T



FIG.16A

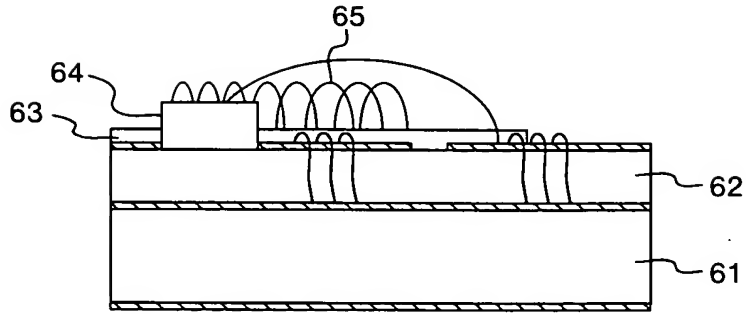
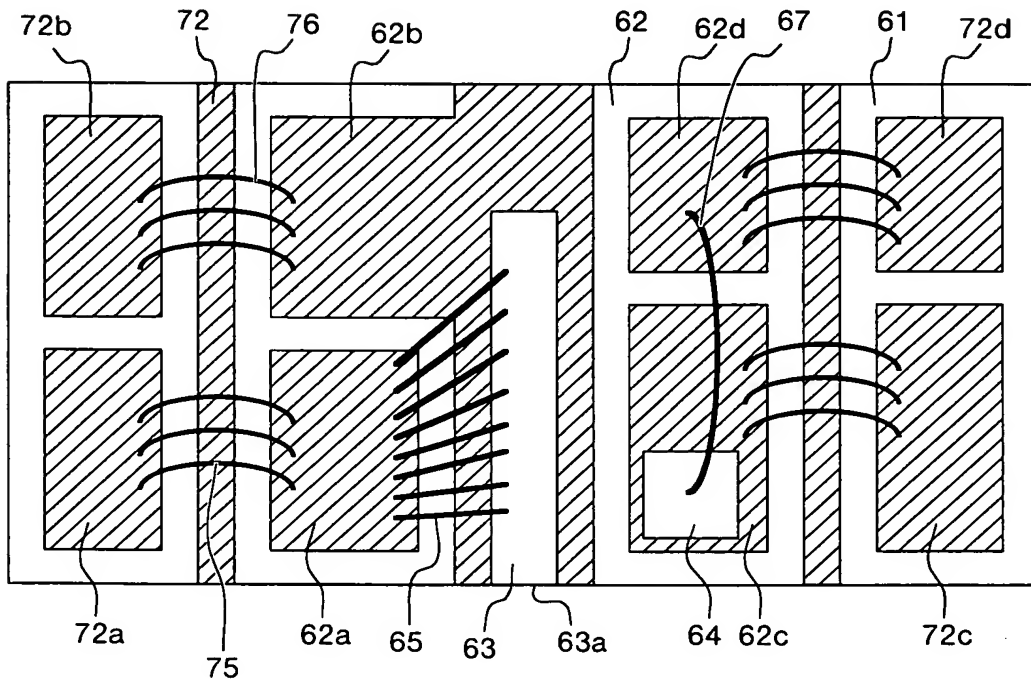
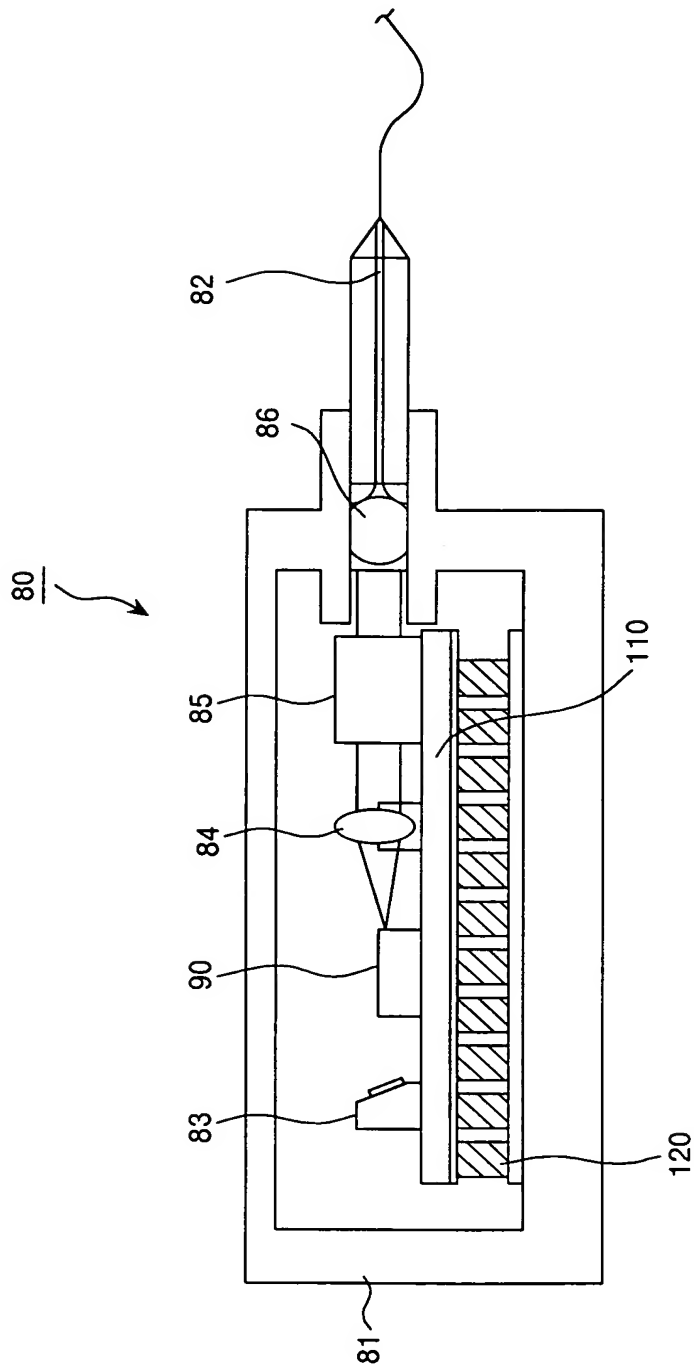


FIG.16B



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FIG.17



A cross-sectional view of a semiconductor device. The device consists of a substrate with a patterned layer 101, a layer 102, and a layer 104. A central structure 103 is connected to a pad 105 via a wire 102a. A large pad 106a is on the left, and a smaller pad 106b is on the right. A layer 104a is on the right side of the central structure.